IN THE CLAIMS

The following claim listing replaces all prior claim listings:

1.   (Currently Amended) A signal-processing apparatus comprising:

a candidate-detecting unit which receives an input signal part from an input signal in time-divided fashion, and identifies characteristic patterns in a portion of the input signal part indicating the probability that the input signal part is a candidate part;

a characteristic-extracting unit which extracts characteristic patterns from the input signal part which alone indicate the probability that the input signal part is the candidate part; and

a detecting unit which detects whether the input signal part is the candidate part based on the characteristic data extracted by the characteristic-extracting unit; and

a determining unit which determines whether the candidate part resulting from the extraction and detection performed by the characteristic-extracting unit and the detecting unit is a commercial message,

wherein,

the determining unit determines whether the candidate part is a commercial message by applying at least one rule selected from the group consisting of a minimum-length priority rule, an adjacent-candidate priority rule and a score priority rule.

2.   (Cancelled).

3.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes a determining unit which determines, from the extracted characteristic data, if the input signal part is identical to a previously designated input signal part.

4.   (Previously Presented) The signal-processing apparatus according to claim 1,

wherein:

the apparatus further comprises an amplitude-detecting unit which detects an amplitude

of the input signal, and

detected amplitudes of the input signal smaller than a predetermined value at a

predetermined interval are extracted by the character-extracting unit as a characteristic pattern

indicating the probability that the input signal part is the candidate part.

5.   (Previously Presented) The signal-processing apparatus according to claim 1,

wherein:

the candidate detecting unit further comprises a change-detecting unit which detects a

change in the input signal, and

detected changes in the input signal greater than a predetermined value at a

predetermined time interval are extracted by the character-extracting unit as a characteristic

pattern indicating the probability that the input signal part is the candidate part.

6.   (Previously Presented) The signal-processing apparatus according to claim 1,

wherein:

the candidate detecting unit further comprises a uniform-component detecting unit which

detects a unit period in which a prescribed component of the input signal falls within a prescribed

range, and

prescribed components of the input signal for the unit period at predetermined time

intervals are extracted by the character-extracting unit as a characteristic pattern indicating the

probability that the input signal part is the candidate part.

7.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes an amplitude-detecting unit which detects an amplitude of the input signal, and

the character-extracting unit extracts the amplitude detected by the amplitude-detecting unit as characteristic data indicating the probability that the input signal part is the candidate part.

8.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes an amplitude-detecting unit which detects an amplitude of the input signal, and

the characteristic-extracting unit extracts the length of the input signal part as characteristic data indicating the probability that the input signal part is the candidate part, where the amplitudes of another signal part preceding or following the input signal part are smaller than a predetermined threshold.

9.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes a correlation-detecting unit which detects the correlation between a left and a right audio portion of the input signal part, and

the characteristic-extracting unit extracts a correlation coefficient from the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

10.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes an amplitude-detecting unit which detects an amplitude of the input signal part, and

the characteristic-extracting unit extracts a mean of the amplitude in the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

11.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detection unit includes a change-detecting unit which detects a change in the input signal part, and

the characteristic-extracting unit extracts the number of times the input signal part sharply changes as characteristic data indicating the probability that the input signal part is the candidate part.

12.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes a uniform-component detecting unit which detects a unit period during which a prescribed component of the input signal part is uniform, and

the characteristic-extracting unit extracts the number of times the prescribed component of the input signal part becomes uniform as characteristic data indicating the probability that the input signal part is the candidate part.

13.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes a mode-detecting unit which detects a mode of the input signal part, and

the characteristic-extracting unit extracts the mode of the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

14.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the characteristic-extracting unit extracts the existence of the candidate part in another signal that precedes or follows the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

15.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

 the detecting unit includes a spectrum-detecting unit which detects a spectrum of the input signal part, and

the characteristic-extracting unit extracts a change in the spectrum before or after the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

16.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the characteristic-extracting unit extracts channel information from the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

17.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the characteristic-extracting unit extracts an area code from the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

18.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the characteristic-extracting unit includes a signal-identifying unit which identifies a source of the input signal part, and

the characteristic extracting unit extracts the source of the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

19.   (Previously Presented). The signal-processing apparatus according to claim 1, wherein:

the apparatus includes a timer which measures time, and

the characteristic-extracting unit extracts the time at which the input signal part is input as characteristic data indicating the probability that the input signal part is the candidate part.

20.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes a genre-identifying unit which identifies a genre of the input signal, and

the characteristic-extracting unit extracts the genre from the signal parts preceding and following the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

21.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes a timer for measuring time and a genre-identifying unit for identifying a genre of the input signal part, and

the characteristic-extracting unit extracts the genres from other signal parts preceding and following the input signal part and the time that has lapsed from the time of inputting the input signal part as characteristic data indicating the probability that the input signal part is the candidate part.

22.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the characteristic-extracting unit extracts the number of times the amplitude of the input signal is smaller than a threshold value or the length of the input signal or the dispersion of amplitude of the input signal as characteristic data indicating the probability that the input signal part is the candidate part.

23-24. (Cancelled).

25.   (Previously Presented) The signal-processing apparatus according to claim 1, further comprising a unit for recording and/or reproducing the input signal.

26.   (Previously Presented) The signal-processing apparatus according to claim 1, further comprising a unit for editing the input signal.

27.   (Previously Presented) The signal-processing apparatus according to claim 1, further comprising a unit for skipping the input signal part.

28.   (Previously Presented) The signal-processing apparatus according to claim 1, further comprising a unit for extracting only the input signal part.

29.   (Previously Presented) The signal-processing apparatus according to claim 1, wherein:

the input signal consists of an audio signal or a video signal, and the input signal part is a commercial message part.

30.   (Currently Amended) A signal-processing method comprising:

receiving an a input signal part and other signal parts from an input signal in time-divided fashion; and

detecting from the input signal a candidate part from the input signal part in accordance with characteristic patterns of the input signal part;

extracting characteristic patterns from the input signal part which alone indicate the probability that the input signal part is the candidate part; and

detecting the candidate part in accordance with the extracted characteristic data;

determining whether the candidate part is a commercial message by applying at least one rule selected from the group consisting of a minimum-length priority rule, an adjacent-candidate priority rule and a score priority rule.

31.   (Cancelled)

32.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the characteristic data indicates that the signal in the candidate part is identical to the input signal part which has been designated.

33.   (Previously Presented) The signal-processing method according to claim 30, wherein:

an amplitude pattern of the input signal smaller than a predetermined value at a predetermined time interval is detected as a characteristic pattern.

34.   (Previously Presented) The signal-processing method according to claim 30, wherein:

a change of the input signal greater than a predetermined value at predetermined time intervals is detected as a characteristic pattern.

35.   (Previously Presented) The signal-processing method according to claim 30, wherein:

a prescribed component of the input signal which falls within a prescribed range during a unit period and at a predetermined time interval is detected as a characteristic pattern[[s]].

36.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the amplitude of the signal parts preceding or following the input signal part are extracted as characteristic data indicating the probability that the input signal part is the candidate part.

37.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the signal parts and the amplitudes of the signal parts preceding or following the input signal part which are smaller than a predetermined threshold are extracted as characteristic data indicating the probability that the input signal part is the candidate part.

38.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the correlation of a left and right audio portion of the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

39.   (Previously Presented) The signal-processing method according to claim 30, wherein:

a mean amplitude in the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

40.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the number of times the input signal sharply changes in the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

41.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the number of times which the prescribed component of the input signal becomes uniform in the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

42.   (Previously Presented) The signal-processing method according to claim 30, wherein:

a mode of the input signal is detected, and the mode of the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

43.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the existence of the candidate part in a signal that precedes or follows the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

44.   (Previously Presented) The signal-processing method according to claim 30, wherein:

a spectrum of the input signal is detected, and a change in the spectrum before or after the input signal part is extracted and used as characteristic data indicating the probability that the input signal part is candidate the candidate part.

45.   (Previously Presented) The signal-processing method according to claim 30, wherein:

channel information of the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

46.   (Previously Presented) The signal-processing method according to claim 30, wherein:

an area code of the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

47.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the source of the input signal part is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

48.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the time at which the input signal part is inputted is extracted as characteristic data indicating the probability that the input signal part is the candidate part.

49. (Previously Presented) The signal-processing method according to claim 30, wherein:

the genres of the signal parts preceding and following the input signal part are extracted as characteristic data indicating the probability that the input signal part is the candidate part.

50. (Previously Presented) The signal-processing method according to claim 30, wherein:

the genre of the signal parts preceding and following the input signal part and the time that has lapsed since the inputting of the input signal part are extracted as characteristic data indicating the probability that the input signal part is the candidate part.

51. (Previously Presented) The signal-processing method according to claim 30, wherein:

the number of times the amplitude of the input signal is smaller than a threshold value, the length of the input signal, or the dispersion of amplitude of the input signal are extracted as characteristic data indicating the probability that the input signal part is the candidate part.

52-54. (Cancelled).

55. (Currently Amended) The signal-processing apparatus according to claim 1, wherein:

the detecting unit includes:

a characteristic-evaluating unit for evaluating the possibility that the input signal part is the candidate part on the basis of the characteristic data, and

a determining unit for determining the ~~candiate~~candidate part from the result of the evaluation performed by the characteristic-evaluating unit.

56.   (Previously Presented) The signal-processing apparatus according to claim 55, wherein:

the characteristic-evaluating unit evaluates the possibility that the input signal part is the candidate part on the basis of characteristic data derived from multiplying weighting values to the characteristic data and adding the weighted characteristic data.

57.   (Currently Amended) The signal-processing apparatus according to claim 55, wherein:

the characteristic-evaluating unit uses a multi-layer ~~perceptron~~perception to determine the possibility that the input signal part is the candidate part.

58.   (Previously Presented) The signal-processing method according to claim 30, wherein:

the possibility that the input signal part is the candidate part is evaluated on the basis of the characteristic data in order to detect the candidate part, and the candidate part is determined from the result of evaluating the possibility.

59.   (Currently Amended) The signal-processing method according to claim 58, wherein:

the possibility that the input signal part is the candidate part is evaluated on the basis of characteristic data derived from multiplying weighing values to the characteristic data and adding the weighted characteristic data.

60.   (Currently Amended) The signal-processing method according to claim 58, wherein:

a multi-layer ~~perceptron~~<u>perception</u> is used to determine the possibility that the input

signal part is the candidate part.